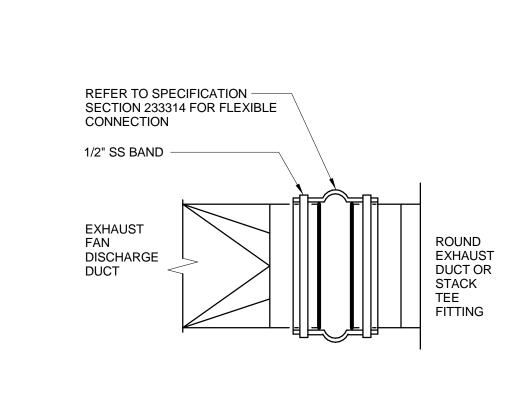


- FLEXIBLE CONNECTION

— FAN COIL UNIT

11 FLOOR MOUNTED FAN COIL UNIT

RETURN GRILLE SIZE TO MATCH FAN COIL UNIT RETURN OPENING



(1) PULL FLEXIBLE DUCT'S INNER LINER OVER DIFFUSER COLLAR

(3) REFER TO SECTION 23 3114 FOR DIFFUSER INSULATION

(2) SECURE FLEXIBLE DUCT INSULATION AND OUTER JACKET WITH DRAW BAND.

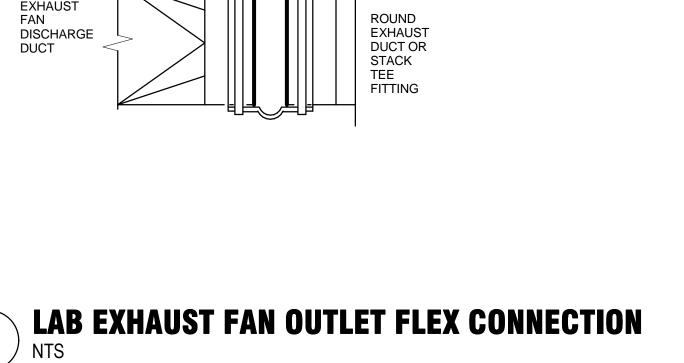
(4) MAINTAIN MIN. 1.5 RADIUS ELBOW. ELBOW SUPPORT DEVICE SIMILAR

TO FLEXFLOW ELBOW SUPPORT BY THERMAFLEX MAY BE USED TO

AND SECURE WITH BRAW BAND.

REQUIREMENT.

ASSURE RADIUS ELBOW.



MIN. 1-1/2" WIDE SADDLE.

ELBOW AND EVERY 5 FT

PROVIDE SUPPORT AT

FOR HORIZONTAL

DUCTOWRK.

- FLEXIBLE DUCT

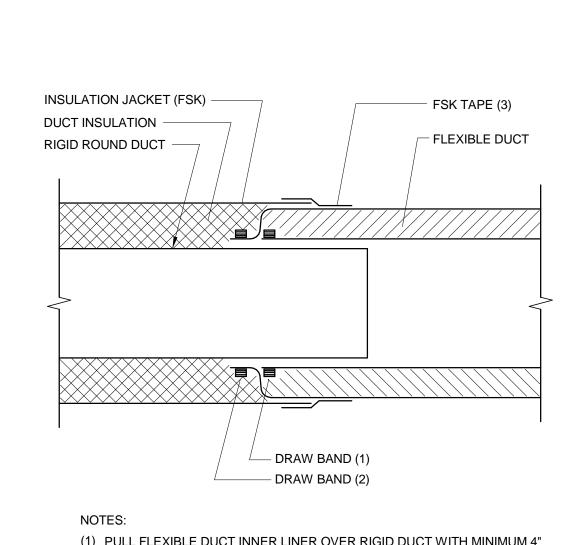
- DRAWBAND (1)

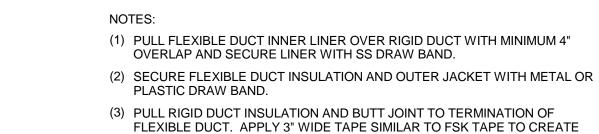
- DRAWBAND (2)

- DIFFUSER WITH

INLET CONNECTION

- ACCESSIBLE CEILING

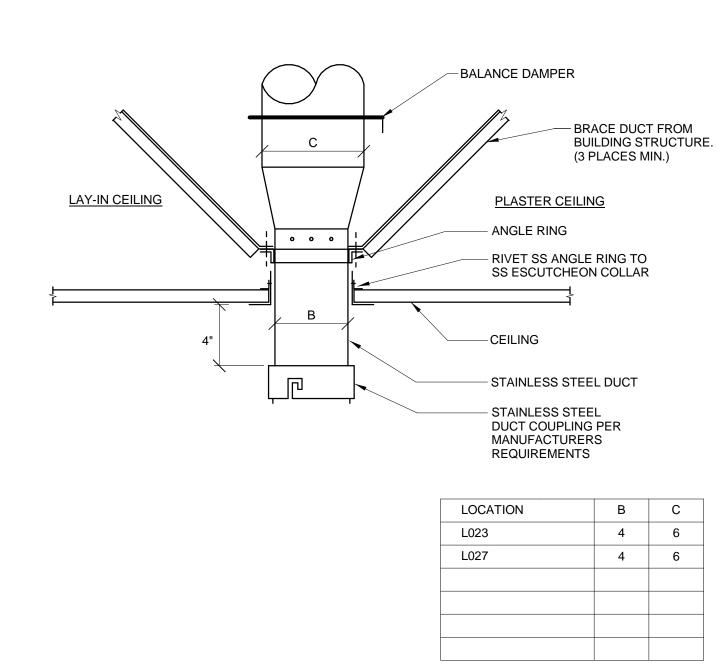




INSULATION JACKET AND RIGID DUCT INSULATION JACKET.

VAPOR BARRIER SEAM. TAPE SHALL BE COMPATIBLE WITH FLEXIBLE DUCT





INSULATED DUCT SUPPORTS (FLEX GLASS FIBER INSUL TYPE-F)

OVER 24"

SEAL JACKET AROUND STRAP OR

—60" МАХ —

✓ STRAP

/ NUT & BOLT

—STRAP

- DUCT INSULATION

HALF ROUND TRAPEZE -

ROUND DUCT

(1) INSULATION AND JACKET MUST RUN CONTINUOUSLY BETWEEN DUCT

INSULATION (TYPE-G). HAMFAB INSERT FOR ROUND DUCTS SHALL BE

(1) UNLESS OTHERWISE SHOWN ON PLANS, RUNOUT SHALL BE SAME SIZE AS CHILLED BEAM INLET SIZE.

5 CHILLED BEAM DUCT CONNECTION
12" = 1'-0"

AND DUCT SUPPORTS, EXCEPT ROUND DUCTS 24" OR SMALLER.

MULTIPLE INSERTS IN ACCORDANCE WITH MANUFACTURERS

RECOMMENDATION. REFER TO SPECIFICATION SECTION 20 0700

(2) WEIGHT SUPPORTING INSULATION TO BE HAMFAB INSERTS OR

FOR WEIGHT SUPPORTING INSULATION REQUIREMENTS.

VAPOR BARRIER

SEALANT_

24" OR SMALLER

FROM SUPPLY

AIR TERMINAL

FOAMGLAS

ROD VAPOR TIGHT.

HANGER STRAP HANGER ROD -

DUCT INSULATION -

RECTANGULAR OR OVAL DUCT

- INSULATION

OUTSIDE OF SUPPORT -OVER 60"-

- WEIGHT SUPPORTING

BY TRAPEZE HANGERS.

INSULATION REQUIRED

FOR DUCT SUPPORTED

-HANGER ROD

SUPPORTING

TO ADDITIONAL

CHILLED BEAMS

BALANCING DAMPER

- FLEX DUCT TO BE RAN STRAIGHT

WITHOUT BENDS

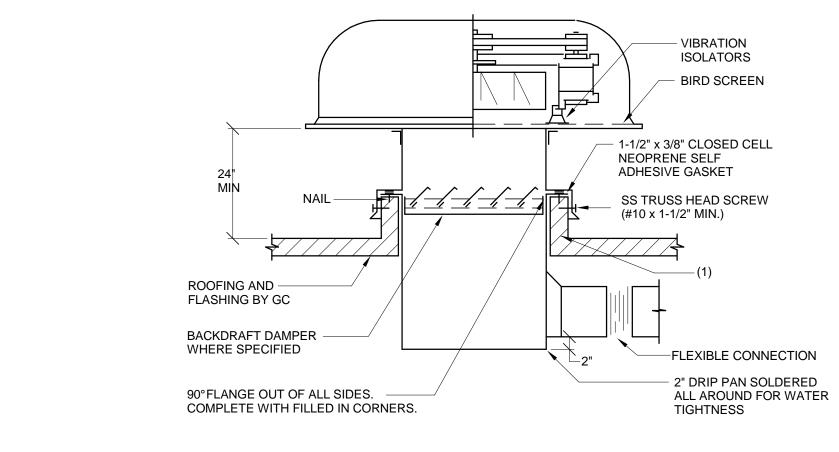
STANDARD FIG 3-10.

PER SMACNA

- CHILLED BEAM

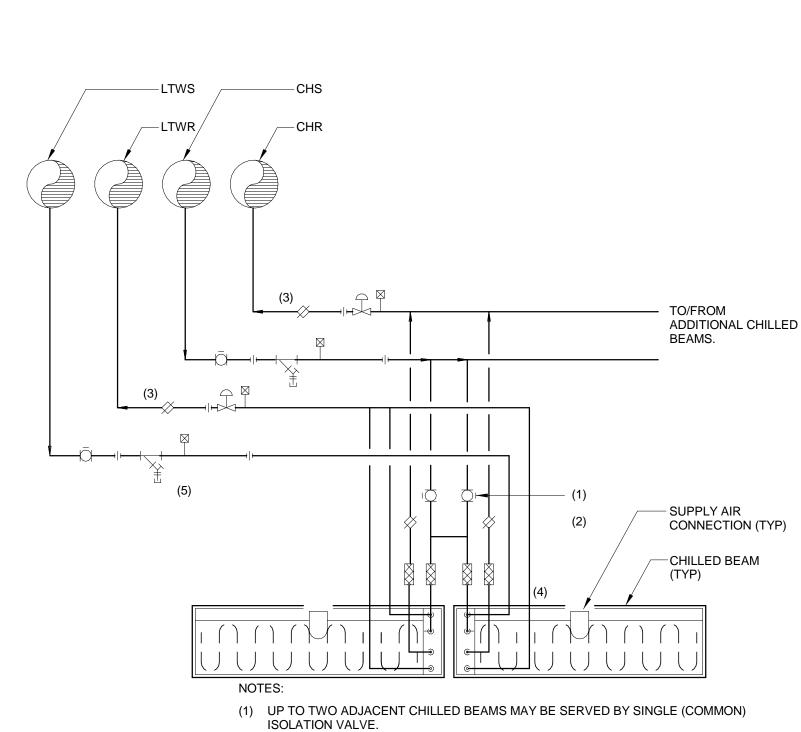
INSULATION. (2)

- DUCT INSULATION



(1) CURB WILL BE PROVIDED BY GC UNLESS SPECIFIED TO BE FURNISHED WITH FAN. CURB FURNISHED WITH FAN WILL BE INSTALLED BY GC.





BALANCING VALVE IF UPSTREAM

(6) PIPE IN REVERSE RETURN WHERE POSSIBLE

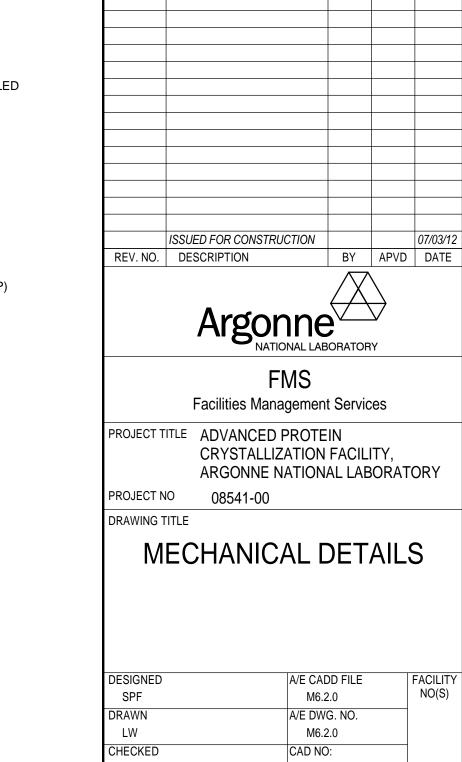
PIPING IS SYMMETRICAL.

(4) MANUAL VENT AT HIGH POINT (5) DRAIN AT EACH LOW POINT

3 CHILLED BEAM PIPING 12" = 1'-0"

(2) UP TO TWO ADJACENT CHILLED BEAMS MAY BE SERVED BY SINGLE (COMMON)

(3) USE BALL VALVE IF CONTROL VALVE IS PRESSURE INDEPENDENT TYPE (PICV).



PROJECT MANAGER

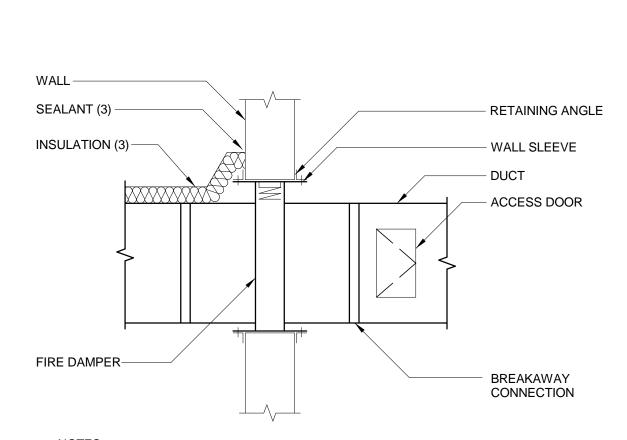
DATE - 08/18/11

ANL - JESSE ADAMS

FACILITY DOCUMENT NUMBER J446-101-W-

DWG STATE

BIND ORDER



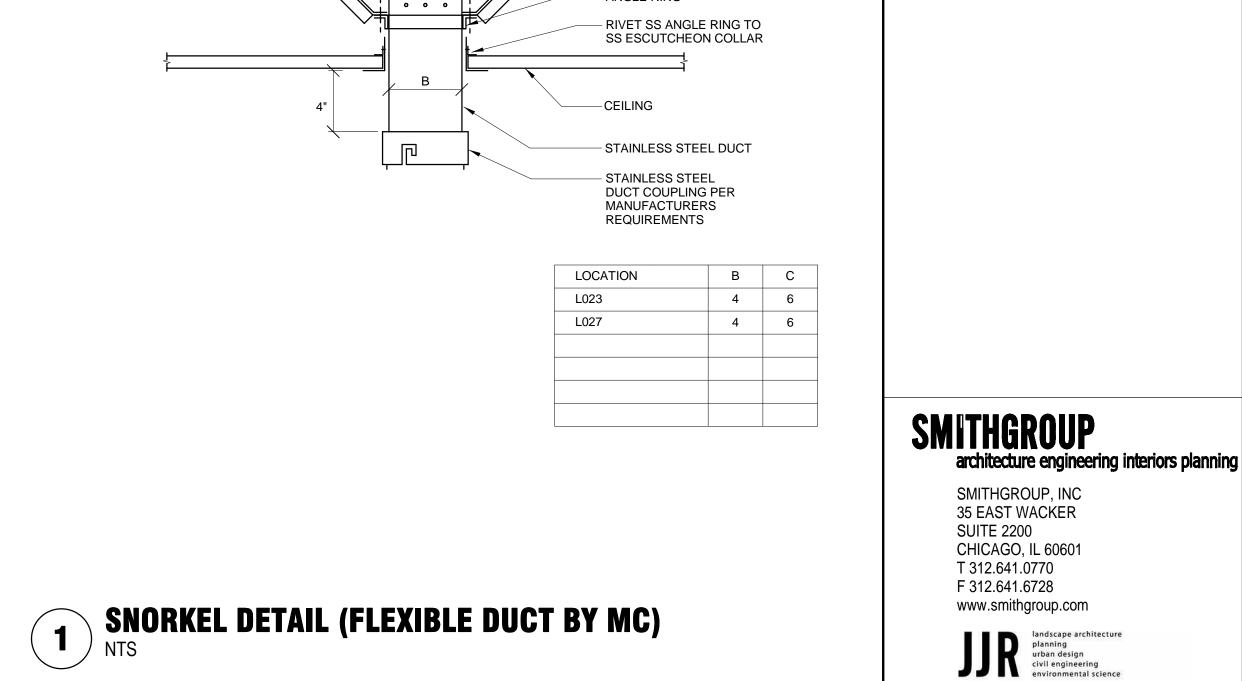
(1) ABOVE DETAIL SHOWS BASIC REQUIREMENT. INSTALL FIRE DAMPERS IN STRICT ACCORDANCE WITH MANUFACTURER'S UL INSTALLATION

INSTRUCTION. (2) VERTICAL CURTAIN TYPE DAMPER SHOWN. HORIZONTAL DAMPER, MULTIPLE BLADE DAMPER, AND COMBINATION FIRE/SMOKE DAMPER INSTALLATION SIMILAR.

(3) FOR DUCTWORK REQUIRING INSULATION, INSTALL INSULATION AND JACKET TO WALL (ALL SIDES) AND APPLY VAPOR BARRIER TAPE TO PREVENT CONDENSATION. TAPE SHALL BE COMPATIBLE WITH INSULATION JACKET AND WALL SURFACE. APPLY INSULATION OVER FIRE DAMPER AFTER INSPECTION HAS BEEN COMPLETED.

9 FIRE DAMPER







35 EAST WACKER DRIVE

CHICAGO, ILLINOIS 60601

SUITE 2200



CONDENSATE PUMP —